switching performance of a switching node. It is not evident or obvious how multiple output queuing delays accumulated as a packet is processed by a sequence of switching nodes as in Field is similar to an evaluation of the switching performance of a particular switching node as in the claimed invention.

Since Field explicitly teaches ignoring any other source of delay except for output queuing delay, including ignoring switching delays (see col. 1, lines 47-51), Field actually teaches away from the claimed invention.

Field also does not disclose or suggest the receive trace record and the transmit trace record elements recited in parent claims 1 and 17 of the present application. The present claims specifically teach the use of receive and transmit trace records which are separate from each other and separate from the processed packets. The receive and transmit trace records persist long after the packets tracked therein have been transmitted out of the packet switching node. It is incorrect to equate the same transient packet header field of Field with a persistent pair of receive and transmit trace records. If one were to equate receive trace record entries with Field's TS value, then Field does not teach a receive trace record having a plurality of such entries. In addition, it is incorrect to equate the switching function of the switching node claimed in the present application with an entire switching node.

Furthermore, Field does not disclose a switching node processor which uses stored information to evaluate the performance of the switching function. Field specifically teaches ignoring all delays other than the output queuing delay because no assessment of performance, including the calculated output queuing delay, is stored at the switching node. On page 4 of the Office Action the Examiner admits that Field is silent on using information in trace record entries to evaluate the performance of the switching function.

The Saunders reference is clearly non-analogous as is apparent from paragraph [0022]. At paragraph [0015] Saunders mentions that latency can be measured from the time the packet arrives at a router until it leaves for the next stop. However, Saunders does not disclose an implementation. Presumably, Saunders refers to the use of an external monitor snooping optical signals received at a subject node and another external monitor snooping optical signals transmitted at an output by the subject network node, with external infrastructure to correlate the extracted information.

The motivation to combine the references alluded to by the Examiner does not teach modifying Field in accordance with Saunders to arrive at the invention as claimed.

The Examiner has further failed to show how Field teaches taking into account dropped packets in providing performance evaluation. Dropped packets will never be queued in output queues and therefore, in accordance with Field, their output queuing delay will not be calculated. Moreover the accumulated queuing delay indication specified in any packet which is subsequently dropped, is lost.

Field describes a process for handling a full packet along with its header. The header combines BA, LA, PR, TS, where

BA is an internal bus address to identify where the internal input buffer is to store a packet;

LA is a logical address of the incoming packet;

PR is the priority of the packet; and

TS is a time-stamp.

The claimed invention only handles header information of the packet. The header information has

a PDU pointer where the full data packet is stored;

a context destination where the packet is destined;

a source port where is the packet came from; and

a TS (TimeStamp).

The claimed invention processes only the header which involves a separate independent process instead of processing a whole data packet to reduce the complexity. Field's measurement process lumps together with the packet storage/forwarding process which may introduce more jitter in the timestamp. The inventive process is independent from the packet size so the same fixed sized header is processed every time.

With the claimed invention, the data packet is stored/retrieved elsewhere which is directed by a PDU pointer and the header provides extra information where the packet will be forward (mapping from one domain to another other domain). Moreover, the TimeStamp of the invention has two independent fields, for receiving and transmit, respectively. Each time the packet arrives or leaves, a timestamp is inserted into the TS field of the header. Field's timestamp is shared in the same field, and the accumulated data is added on top of it when the packet leaves.

For all the foregoing reasons, there is no disclosure or teaching in either Field or Saunders which discloses or teaches anything which would have suggested applicant's presently claimed invention to one of ordinary skill in the art. Moreover, there is no disclosure or teaching in Field or Saunders which suggest the desirability of combining any portions thereof effectively to anticipate or suggest applicant's presently claimed invention. Accordingly, reconsideration and withdrawal of these grounds of rejection are respectfully requested.

2. The remaining claims have been rejected as obvious over Field in view of Saunders, and further in view of the patents to Berning No. 6,038,619, Wecker No. 6,289,464, Weir No. 5,748,627, Brown No. 6,754,211, Abu-Amara No. 5,870,396, Lin No. 4,937,817, Jacobson No. 6,934,256, Bare No. 6,577,600, and/or Li No. 6,567,408. Since these claims ultimately depend from claims 1 or 17, they should be allowed since claims 1 and 17 are patentable over the cited prior art as set forth above.

Allowance of claims 1-27 is courteously solicited.

Respectfully submitted,

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